

## **EXHIBIT D**

CLAIM CHARTS BASED ON PRELIMINARY INFRINGEMENT ANALYSIS  
U.S. Patent No. 8,224,569

**Ex. D - U.S. Patent No. 8,224,569 – Volvo Car Corporation and Volvo Car USA, LLC**

**Claim 2**

Omnitek Partners LLC (“Omnitek”) provides evidence of infringement of claim 2 of U.S. Patent No. 8,224,569 (hereinafter “the ’569 patent”) by Volvo Car Corporation and Volvo Car USA, LLC (collectively “Volvo”). In support thereof, Omnitek provides the following claim charts.

“Accused Instrumentalities” as used herein refers to at least the following products and services: Volvo Sensus Navigation (*See* <https://www.volvcars.com/intl/why-volvo/human-innovation/future-of-driving/connectivity/sensus-navigation>), available on Volvo vehicles. The Volvo Sensus Navigation product line was introduced by at least 2013 (*See* <https://www.digitrends.com/car-reviews/2013-volvo-xc60-review/> and <https://www.jdpower.com/cars/volvo/new-2013-volvo>) (describing the Sensus navigation system found in a model year 2013 Volvo vehicle.) Therefore, the infringement has been occurring since at least that time. These claim charts demonstrate Volvo’s infringement, and provide notice of such infringement, by comparing each element of the asserted claims to corresponding components, aspects, and/or features of the Accused Instrumentalities. These claim charts are not intended to constitute an expert report on infringement. These claim charts include information provided by way of example, and not by way of limitation.

The analysis set forth below is based only upon information from publicly available resources regarding the Infringing Instrumentalities, as Volvo has not yet provided any non-public information. An analysis of Volvo’s (or other third parties’) technical documentation, and/or software source code, may assist in fully identifying all infringing features and functionality. Accordingly, Omnitek reserves the right to supplement this infringement analysis once such information is made available to Omnitek. Furthermore, Omnitek reserves the right to revise this infringement analysis, as appropriate, upon issuance of a court order construing any terms recited in the asserted claims.

Unless otherwise noted, Omnitek contends that Volvo directly infringes the ’569 patent in violation of 35 U.S.C. § 271(a) by selling, offering to sell, making, using, and/or importing the Infringing Instrumentalities. The following exemplary analysis demonstrates that infringement. Unless otherwise noted, Omnitek further contends that the evidence below supports a finding of indirect infringement under 35 U.S.C. §§ 271(b) and/or (c), in conjunction with other evidence of liability under one or more of those subsections. Volvo makes, uses, sells, imports, or offers for sale in the United States, or has made, used, sold, imported, or offered for sale in the past, without authority, or induces others to make, use, sell, import, or offer for sale in the United States, or has induced others to make, use, sell, import, or offer for sale in the past, without authority products, equipment, or services that infringe claim 2 of the ’569 patent, including without limitation, the Accused Instrumentalities.

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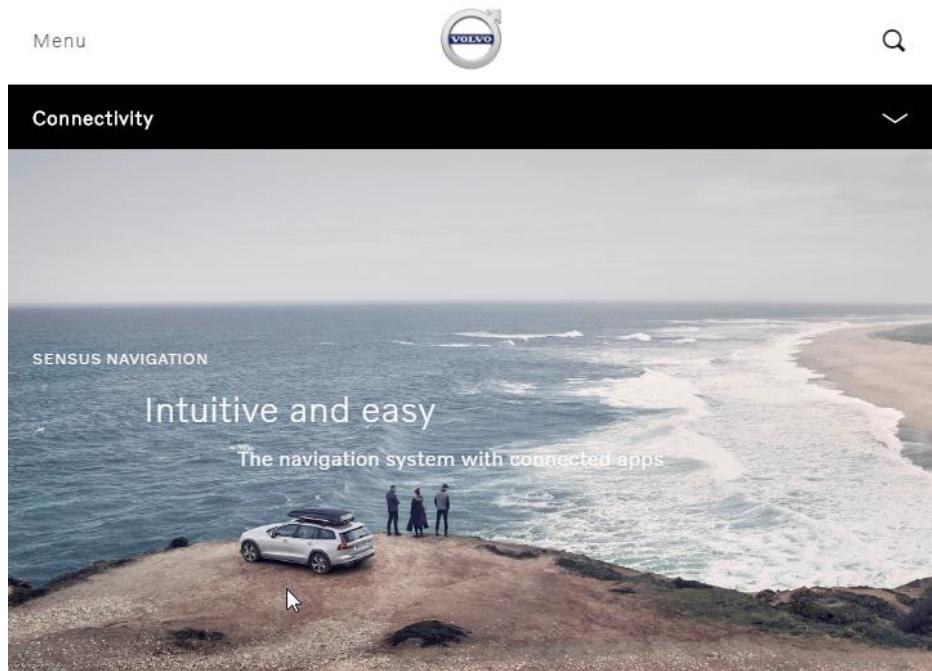
Unless otherwise noted, Omnitek believes and contends that each element of each claim asserted herein is literally met through Volvo's provision of the Infringing Instrumentalities. However, to the extent that Volvo attempts to allege that any asserted claim element is not literally met, Omnitek believes and contends that such elements are met under the doctrine of equivalents. More specifically, in its investigation and analysis of the Infringing Instrumentalities, Omnitek did not identify any substantial differences between the elements of the patent claims and the corresponding features of the Infringing Instrumentalities, as set forth herein. In each instance, the identified feature of the Infringing Instrumentalities performs at least substantially the same function in substantially the same way to achieve substantially the same result as the corresponding claim element.

To the extent the chart of an asserted claim relies on evidence about certain specifically-identified Accused Instrumentalities, Omnitek asserts that, on information and belief, any similarly-functioning instrumentalities also infringes the charted claim. Omnitek reserves the right to amend this infringement analysis based on other products made, used, sold, imported, or offered for sale by Volvo. Omnitek also reserves the right to amend this infringement analysis by citing other claims of the '569 patent, not listed in the claim chart, that are infringed by the Accused Instrumentalities. Omnitek further reserves the right to amend this infringement analysis by adding, subtracting, or otherwise modifying content in the "Accused Instrumentalities" column of each chart.

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## Volvo Car Corporation - Sensus

Sensus Navigation is the fully integrated, connected navigation system that helps you get where you want to go as easily as possible. Helpful features include Send to Car, which allows you to send destinations to your car, either from your browser or through the Volvo On Call app. Sensus Navigation also gives you access to navigation-related services and apps that help you find new experiences and new places to go, in a way that's intuitive and easy to understand.



### Sensus Navigation

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Source: <https://www.volvocars.com/intl/why-volvo/human-innovation/future-of-driving/connectivity/sensus-navigation>

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**U.S. Patent No. 8,224,569**

Claim	US Patent 8,224,569	Description of the Infringement
Indep. Cl. 2  2-p	A method for electronically generating driving directions without text entry, the method comprising:	<p>Volvo integrates navigation functions (electronically generating driving directions) in the Sensus multimedia system installed in their cars.</p>  <p>Source: Volvo Sensus Navigation as featured in the V90 Cross Country <a href="https://www.telegraph.co.uk/business/sme-library/fleet-management/connected-cars-questions-answered/">https://www.telegraph.co.uk/business/sme-library/fleet-management/connected-cars-questions-answered/</a> (annotation added)</p>  <p>Source: Volvo Sensus Navigation Tutorial @0:20, <a href="https://www.youtube.com/watch?v=KVlujeJ67N0">https://www.youtube.com/watch?v=KVlujeJ67N0</a> (annotation added)</p>

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Claim	US Patent 8,224,569	Description of the Infringement
		<p>In the Volvo Sensus Navigation system "Several navigation system functions can be activated with voice commands." (without text entry)</p> <p><b>Control<sup>3</sup> the navigation system* with voice recognition</b></p> <p>Several navigation system functions can be activated with voice commands.</p> <p>Press  on the right-hand keypad on the steering wheel and say one of the following commands:</p> <ul style="list-style-type: none"> <li>• "Navigation" - Initiates a navigation dialogue and shows examples of commands.</li> <li>• "Take me home" - Guidance is given to the Home position.</li> <li>• "Go to [City]" - Specifies a city as a destination. Example "Drive to London".</li> <li>• "Go to [Address]" - Specifies an address as a destination. An address must contain city and street. Example "Drive to 5 King's Road, London".</li> <li>• "Add intersection" - Starts a dialogue where two streets must be specified. The intersection point of the specified streets then becomes the destination.</li> </ul> <p>Source: Sensus Navigation Manual, p.9,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">(emphasis added)</a></p> <ul style="list-style-type: none"> <li>• "Go to [Post code]" - Specifies a post code as a destination. Example "Drive to 1 2 3 4 5".</li> <li>• "Go to [contact]" - Specifies an address from the phone book as a destination. Example "Drive to Robyn Smith".</li> <li>• "Search [POI category]" - Searches for adjacent points of interest (POI) within a certain category (e.g. restaurants)<sup>4</sup>. To have the list sorted along the route - say "Along the route" when the results list is shown.</li> <li>• "Search [POI category] in [City]" - Searches for points of interest (POI) within a certain category and city. The list of results is sorted according to the city's central point. Example "Search for restaurant in London".</li> <li>• "Search [POI name]". Example "Search Kielder Forest".</li> </ul>

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Claim	US Patent 8,224,569	Description of the Infringement
2-a	indicating a starting address or starting location on a map without text entry;	<p>The Volvo Sensus Navigation system uses the current location provided by the GPS controller and displayed on the screen as the starting location (indicating a starting location without text entry).</p>  <p>Activating navigation</p> <p>Anäsvägen Current position ①</p> <p>Lune - Leave The World...</p> <p>Daniel's Phone Telenor</p> <p>Studio Sound optimized for driver</p> <p>22°C AUTO 22°C</p> <p>②</p> <p>① Navigation system tile</p> <p>Source: Sensus Navigation Manual, p.4,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf</a>  (annotation added)</p>

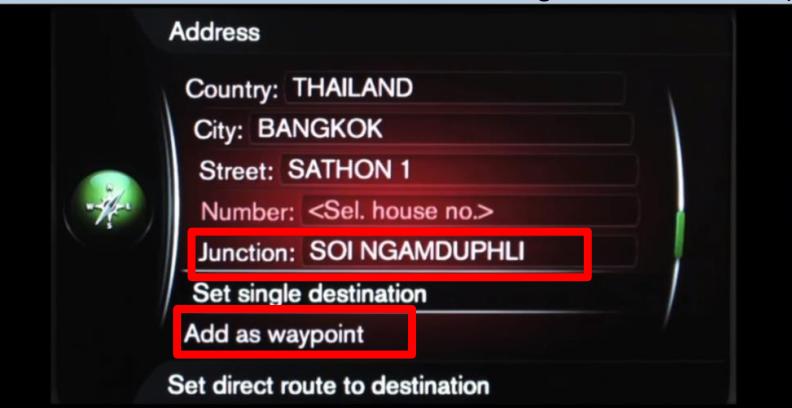
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Claim	US Patent 8,224,569	Description of the Infringement
2-b	indicating an ending address or ending location on a map without text entry;	<p>The Volvo Sensus Navigation system recognizes the voice command "Go to [Address]" which "Specifies an address as a destination" (indicating an ending address or ending location on a map without text entry).</p> <p><b>Control<sup>3</sup> the navigation system* with voice recognition</b></p> <p>Several navigation system functions can be activated with voice commands.</p> <p>Press  on the right-hand keypad on the steering wheel and say one of the following commands:</p> <ul style="list-style-type: none"> <li>• "Navigation" - Initiates a navigation dialogue and shows examples of commands.</li> <li>• "Take me home" - Guidance is given to the Home position.</li> <li>• "Go to [City]" - Specifies a city as a destination. Example "Drive to London".</li> <li>• "Go to [Address]" - Specifies an address as a destination. An address must contain city and street. Example "Drive to 5 King's Road, London".</li> <li>• "Add intersection" - Starts a dialogue where two streets must be specified. The intersection point of the specified streets then becomes the destination.</li> </ul> <p>Source: Sensus Navigation Manual, p.9,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">(emphasis added)</a></p>

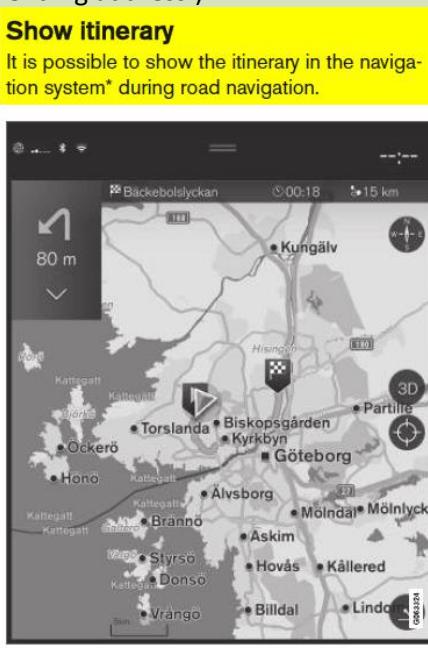
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2-c	generating driving directions based on the indicated starting address or starting location and ending address or ending location; and	<p>The Volvo Sensus Navigation system “Settings are selected ... to define how the route is to be calculated .... in the navigation system” (generating driving directions based on the indicated starting address, ending address).</p> <p><b>Settings for route and road navigation</b></p> <p>Settings are selected here to define how the route is to be calculated and the road navigation presented in the navigation system*.</p> <p>Settings ➔ Navigation ➔ Route and Guidance</p> <p>Settings can be made within the following areas:</p> <ul style="list-style-type: none"> <li>• Arrival Time Format</li> <li>• Voice Guidance Level</li> <li>• Choose Default Route Type</li> <li>• Route Learning</li> <li>• Avoidance Settings</li> <li>• Suggest Petrol Station</li> </ul> <p>Source: Sensus Navigation Manual, p.22,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf</a>  (emphasis added)</p>  <p>Source: Volvo Sensus Navigation Tutorial @3:27, <a href="https://www.youtube.com/watch?v=KvluijeJ67N0">https://www.youtube.com/watch?v=KvluijeJ67N0</a> (annotation added)</p>

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2-d	<p>indicating an intermediate address or location on the map where the generating generates driving directions from the starting address or location to the intermediate address and location and from the intermediate address or location to the ending address or location;</p>	<p>The Volvo Sensus Navigation provides for adding a “Junction” as a “Waypoint” to a route (intermediate address) and generating an “itinerary” (driving directions from the starting address or location to the intermediate address and location and from the intermediate address or location to the ending address or location).</p>  <p>Source: Volvo Sensus Navigation Tutorial @1:44, <a href="https://www.youtube.com/watch?v=KvlujeJ67N0">https://www.youtube.com/watch?v=KvlujeJ67N0</a> (annotation added)</p> <p><b>Itinerary</b>  The itinerary is the route suggested in the navigation system* when the user has entered a destination.  The first defined position will be the itinerary's destination.  The subsequent positions will be the itinerary's <b>intermediate destinations</b>.  An itinerary, its destination and intermediate destinations can easily be edited afterwards.</p> <p><b>Related information</b></p> <ul style="list-style-type: none"> <li>• Show itinerary (p. 15)</li> <li>• Edit or delete the itinerary (p. 16)</li> <li>• Show an alternative route (p. 16)</li> <li>• Showing guidance points in the itinerary (p. 17)</li> </ul> 

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		<p>Source: Sensus Navigation Manual, p.15,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf</a> (emphasis added)</p>
2-e	wherein the intermediate address is indicated on a different map as one of the starting and ending address.	<p>The Volvo Sensus Navigation “displays the itinerary...during road navigation” (the intermediate address is indicated on a different map as one of the starting and ending address.)</p> <p><b>Itinerary</b>  The itinerary is the route suggested in the navigation system* when the user has entered a destination.  The first defined position will be the itinerary's <b>destination</b>.  The subsequent positions will be the itinerary's <b>intermediate destinations</b>.  An itinerary, its destination and intermediate destinations can easily be edited afterwards.</p> <p><b>Related information</b></p> <ul style="list-style-type: none"> <li>• Show itinerary (p. 15)</li> <li>• Edit or delete the itinerary (p. 16)</li> <li>• Show an alternative route (p. 16)</li> <li>• Showing guidance points in the itinerary (p. 17)</li> </ul> <p><b>Show itinerary</b>  It is possible to show the itinerary in the navigation system* during road navigation.</p>  <p>Source: Sensus Navigation Manual, p.15,  <a href="https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf">https://az685612.vo.msecnd.net/pdfs/60e30a5db4efb136ed86c99e372daac667634796/SensusNavigation_MY19_en-GB_TP28352.pdf</a> (emphasis added)</p> <p>The patent specifications provides for the maps being displayed sequentially on the screen.</p>

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		<p>lake does not generally have an address). Although FIG. 2 shows a single map, the starting, ending, and/or intermediate addresses/locations can be on different maps. Such different maps can be displayed simultaneously, such as in different windows on the same display or can be displayed sequentially.</p> <p>Source: US Patent 8,224,569 (See column 5, lines 9-14)</p>

**Caveat:** The notes and/or cited excerpts utilized herein are set forth for illustrative purposes only and are not meant to be limiting in any manner. For example, the notes and/or cited excerpts, may or may not be supplemented or substituted with different excerpt(s) of the relevant reference(s), as appropriate. Further, to the extent any error(s) and/or omission(s) exist herein, all rights are reserved to correct the same.